

ABSTRACT

An optical device includes an optical substrate having a first surface on which a lens element is formed, and a second surface with a projecting part or parts. The projecting part or parts are mated with a corresponding groove or grooves in the surface of a supporting substrate on which an optical element is mounted. The optical element is thereby optically aligned with the lens element. The projecting part or parts and groove or grooves are preferably formed by photolithography.